1-P

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/064,293 | 06/28/2002 | Jean-Hiram Coffy | F-533 | 4437 |

919 7590 06/15/2006

PITNEY BOWES INC.
35 WATERVIEW DRIVE
P.O. BOX 3000
MSC 26-22
SHELTON, CT 06484-8000

| EXAMINER | |
|---|---|
| SALL, EL HADJI MALICK | |
| **ART UNIT** | **PAPER NUMBER** |
| 2157 | |

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/064,293 | COFFY ET AL. | |
| | Examiner | Art Unit | |
| | El Hadji M. Sall | 2157 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

**1.** This action is responsive to the application filed on December 7, 2005. Claims 1-22 are pending. Claims 1-3, 11, 15 and 16 are amended. Claims 1-22 represent system and method for selecting an external user interface using spatial information.

**2.** ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**3.** Claims 1-5, 7, 8, 10, 11, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al. U.S. 5,812,865 in view of Nishikawa et al. U.S. 4,949,268.

Theimer teaches the invention substantially as claimed including specifying and establishing communication data paths between particular media devices in multiple media device computing systems based on context of a user or users (see abstract).

As to claims 1, 15, Theimer teaches a method and a system for selecting an external processor as a user interface to a machine comprising:

accessing control grid position information for the machine (column 6, lines 25-32, Theimer discloses locating moving users and devices (i.e. by locating moving users and devices, inherently, "accessing control grid (figure 1, item 11) information for the machine" occurs));

obtaining position information for the external processor (column 8, lines 54-67, Theimer discloses user's agent collects location information about its associated user from various sources); and

using the control grid position information and the external processor position information in determining whether an external processor is in the control grid of a machine (column 8, lines 54-67, Theimer discloses synthesizes that information into one opinion about where the user currently is),

wherein the machine is located in a space that includes a floor and the control grid corresponds to a defined area of the floor that is a subset of the space (figure 1).

Theimer fails to teach explicitly dimensional coordinates.

However, Nishikawa teaches land vehicle navigation system. Nishikawa teaches dimensional coordinates (column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nishikawa to provide wherein the machine is

located in a space that includes a floor that can be referenced in dimensional coordinates and the control grid corresponds to a defined area of the floor that is a subset of the space. One would be motivated to do so to allow the best positioning data (abstract).

As to claim 2, Theimer teaches the method of claim 1 wherein:

the determination of whether an external processor is in the control grid is used to make a control transfer decision (column 8, lines 54-67, Theimer discloses location information sources could include sighting information from the Active Badges, from the Tab agents of the Tabs the user is currently carrying, from monitoring the input activity on various computer terminals, and from a variety of other sources (i.e. location information sources inherently "is used to make a control transfer decision")), wherein the user interface control of the machine is transferred to the external processor (figure 4, item 122; column 10, lines 52-56).

As to claim 3, Theimer teaches the method of claim 1 further comprising:

obtaining cryptographic authentication information for an external processor (column 21, lines 23-26, Theimer discloses Authentication controls could be added so that the Badge Server only returns information about a particular badge ID to a list of authorized clients for that badge ID, and encryption will help for this problem as well (i.e. inherently, "cryptographic authentication information" is obtained for the badge server)).

As to claim 4, Theimer teaches the method of claim 3 wherein: the determination of whether an external processor is in the control grid and the authentication information is used to make a control transfer decision (column 8, lines 54-67, Theimer discloses location information sources could include sighting information from the Active Badges, from the Tab agents of the Tabs the user is currently carrying, from monitoring the input activity on various computer terminals, and from a variety of other sources (i.e. location information sources inherently "is used to make a control transfer decision"); column 21, lines 23-26, Theimer discloses Authentication controls could be added so that the Badge Server only returns information about a particular badge ID to a list of authorized clients for that badge ID).

As to claim 5, Theimer teaches the method of claim 4 wherein: the authentication information is obtained from a user of the external processor (column 26, lines 52-54, Theimer discloses such identity and authentication information may be contained in a user's Active Badge).

As to claim 7, Theimer teaches the method of claim 1 further comprising:

Accessing control grid position information for a second machine (column 6, lines 25-32, Theimer discloses locating moving users and devices (i.e. by locating moving

users and devices, inherently, "accessing control grid (figure 1, item 11) information for the machine" occurs));

Obtaining position information for a second external processor (column 8, lines 54-67, Theimer discloses user's agent collects location information about its associated user from various sources); and

Using the control grid position information and the external processor position information in determining whether to give priority of control to the external processor or the second external processor (column 8, lines 54-67, Theimer discloses synthesizes that information into one opinion about where the user currently is; column 26, lines 14-23, Theimer discloses some devices may belong to particular users--a workstation in an office, for example, may be thought of as belonging to the user who resides in that office. Such ownership privileges may allow the user highest priority for controlling the resources of that workstation).

As to claim 8, Theimer teaches the method of claim 7 further comprising:

Obtaining hierarchy priority information for the external processor and the second external processor (column 25, lines 13-18, Theimer discloses the priority level (i.e. hierarchal priority may indicate that the accompanying message should be delivered to the user); and

Using the hierarchy priority information in determining whether to give priority of control to the external processor or the second external processor (column 25, lines 33-36, Theimer discloses evaluates the message based on the context of the recipient and

the priority of the message, and may determine a display property which indicates how a message should be delivered).

As to claim 10, Theimer teaches the method of claim 1 further comprising:

Obtaining updated position information for the external processor (column 11, lines 48-50); and

Using the updated position information in determining weather to maintain external processor control of the machine (column 11, lines 51-67).

As to claim 11, Theimer teaches a method for manipulating a file comprising:

Selecting a file with a portable processor using a wireless communications channel (column 4, lines 7-9, Theimer discloses another aspect of the invention provides a system in which media data paths between users (i.e. user's portable devices and agents (column 8, lines 65-67) may be selected depending upon the context or state of the user or users (i.e. inherently "selecting a file with a portable processor or device using wireless communications channel)); and

Selecting a machine to process the file using position information relating to the portable processor (column 8, lines 54-67, user's agent collects location information (i.e. equated to "a machine to process the file using position information relating to the portable processor), and user's current location can be sent directly to the user's agent via an RPC).

control grid position information and the external processor position information

in determining whether an external processor is in the control grid of a machine (column 8, lines 54-67, Theimer discloses synthesizes that information into one opinion about where the user currently is).

wherein the machine is located in a space that includes a floor and the control grid corresponds to a defined area of the floor that is a subset of the space (figure 1).

Theimer fails to teach explicitly dimensional coordinates.

However, Nishikawa teaches land vehicle navigation system. Nishikawa teaches dimensional coordinates (column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nishikawa to provide wherein the machine is located in a space that includes a floor that can be referenced in dimensional coordinates and the control grid corresponds to a defined area of the floor that is a subset of the space. One would be motivated to do so to allow the best positioning data (abstract).

As to claim 13, Theimer teaches the method of claim 11, further comprising:

Selecting a second machine to process at least a portion of the file using position information relating to the portable processor (column 8, lines user's agent collects location information (i.e. equated to "a machine to process at least a portion of the file using position information relating to the portable processor), and user's current location can be sent directly to the user's agent via an RPC).

As to claim 14, Theimer teaches the method of claim 11 further comprising:

Selecting a first machine to process a portion of the file using position information relating to the portable processor (column 8, lines user's agent collects location information (i.e. equated to "a machine to process at least a portion of the file using position information relating to the portable processor), and user's current location can be sent directly to the user's agent via an RPC); and

Selecting a second machine to process a second portion of the file using position information relating to the portable processor (column 8, lines user's agent collects location information (i.e. equated to "a machine to process at least a portion of the file using position information relating to the portable processor), and user's current location can be sent directly to the user's agent via an RPC);

As to claim 16, Theimer teaches a system for selecting an external processor as a user interface to a machine comprising:

A processor (figure 1, item 26);

A control grid position map data base information for at least one machine connected to the processor (figure 1; column 28, lines 13-23, Theimer discloses UserAgents may control the communication channel, storing communication information for a user during certain states (i.e. "a control grid position map database (or UserAgents) information for one machine (figure 1, item 24, 26 or 28) connected to the processor"));

A position information receiver for obtaining position information data for an external processor (column 8, lines 54-67, Theimer discloses user's agent collects location information about its associated user from various sources); and

A processor having processing instructions for using the control grid position map database and the external processor position information in determining whether an external processor is in the control grid of a machine (column 8, lines 54-67, Theimer discloses synthesizes that information into one opinion about where the user currently is).

wherein the machine is located in a space that includes a floor and the control grid corresponds to a defined area of the floor that is a subset of the space (figure 1).

Theimer fails to teach explicitly dimensional coordinates.

However, Nishikawa teaches land vehicle navigation system. Nishikawa teaches dimensional coordinates (column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nishikawa to provide wherein the machine is located in a space that includes a floor that can be referenced in dimensional coordinates and the control grid corresponds to a defined area of the floor that is a subset of the space. One would be motivated to do so to allow the best positioning data (abstract).

As to claim 17, Theimer teaches the system of claim 16 wherein:

The receiver for obtaining position information is an indoor positioning system receiver (column 2, lines 11-16, Theimer discloses receivers placed in each room of a building, thereby allowing detection of where each user is currently located).

As to claim 18, Theimer teaches the system of claim 17 wherein:

The indoor positioning system provides relative position data relative to a reference point (column 2, lines 11-16, Theimer discloses the receiver allowing detection of where each user is currently located (i.e. "reference point")).

**4.** Claim 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al. U.S. 5,812,865 in view of Nishikawa et al. U.S. 4,949,268, and further in view of Gould et al. U.S. 6,920,561.

Theimer teaches the invention substantially as claimed including specifying and establishing communication data paths between particular media devices in multiple media device computing systems based on context of a user or users (see abstract).

As to claim 6, Theimer teaches the method of claim 4.

Theimer fails to teach explicitly the authentication information is obtained from a user of the external processor and includes biometric information.

However, Gould teaches method and system for enabling free seating using biometrics through a centralized authentication. Gould teaches authenticated biometric information in a computer (column 4, lines 59-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Gould to provide the authentication information is obtained from a user of the external processor and includes biometric information. One would be motivated to do so to allow user credentials securely imported without needing an additional identification (see abstract).

**5.** Claims 9, 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al. U.S. 5,812,865 in view of Nishikawa et al. U.S. 4,949,268, and further in view of Nagasaka et al. U.S. 6,725,300.

As to claim 9, Theimer teaches the method of claim 1.

Theimer fails to teach explicitly downloading user interface logic data to the external processor.

However, Nagasaka teaches control device for controlling the transmission and receipt of data and a method of determining the transmitter and the receiver of the data, Nagasaka teaches downloading data of the corresponding user interface (column 26, lines 51-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nagasaka to provide downloading user interface logic data to the external processor. One would be motivated to do so to allow operability of the device control (see abstract).

As to claim 12, Theimer teaches the method of claim 11.

Theimer fails to teach explicitly downloading the file to the portable processor.

However, Nagasaka teaches downloading data of the corresponding user interface (column 26, lines 51-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nagasaka to provide downloading the file to the portable processor. One would be motivated to do so to allow operability of the device control (see abstract).

As to claim 20, Theimer teaches the method of claim 9 further comprising:

Theimer fails to t each explicitly downloading user interface logic data to the external processor when the external processor enters the second grid.

However, Nagasaka teaches downloading data of the corresponding user interface (column 26, lines 51-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Nagasaka to provide downloading user interface logic data to the external processor when the external processor enters the second

grid. One would be motivated to do so to allow operability of the device control (see abstract).

**6.** Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al. U.S. 5,812,865 in view of Nishikawa et al. U.S. 4,949,268, and further in view of Eslambolchi et al. U.S. 6,808,116 (referred to hereafter as Eslam).

As to claim 19, Theimer teaches the system of claim 20.

Theimer fails to teach explicitly the indoor position system provides absolute latitude and longitude data.

However, Eslam teaches fiber jumpers with data storage method and apparatus. Eslam teaches latitude and longitude information (column 6, line 63).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Eslam to provide the indoor position system provides absolute latitude and longitude data. One would be motivated to do so to allow easy and automatic integration of traffic information.

As to claim 21, Theimer teaches the system of claim 15.

Theimer fails to teach explicitly the means for obtaining position information comprises an indoor electromagnetic wave positioning system.

However, Eslam teaches electronic magnetic wave positioning (column 2, lines 17-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Eslam to provide the means for obtaining position information comprises an indoor electromagnetic wave positioning system. One would be motivated to so to allow the tag to communicate the jumper cable identification information to the radiation unit (see abstract).

**7.** Claim 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al. U.S. 5,812,865 in view of Nishikawa et al. U.S. 4,949,268, and further in view of Teller et al. U.S. 6,816,437.

As to claim 22, Theimer teaches the system of claim 15.

Theimer fails to teach explicitly means for obtaining position information comprises an ultrasonic positioning system.

However, Teller teaches method and apparatus for determining orientation. Teller teaches an ultrasonic positioning system (column 4, lines 7-8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Theimer in view of Teller to provide means for obtaining position information comprises an ultrasonic positioning system. One would be motivated to do so to allow designing of a keyboard that can be made ultra thin.

***8.*** ***Response to Arguments***

Some of Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection. Others have been considered but the are not persuasive.

(A) Applicant argues that it is clear that Theimer does not teach a control grid.

In regards to point (B), examiner respectfully disagrees.

Figure 1, Theimer teaches individual rooms 11 (i.e. "control grids" in a "defined area of the floor"), in an office environment (i.e. "a space").

(B) Applicant argues that with regard to claim 2, Theimer does not teach or suggest transfer of the user interface control of the machine.

In regards to point (B), examiner respectfully disagrees.

figure 4, item 122; column 10, lines 52-56, Theimer discloses exporting (i.e. "transferring") the RPC interface for UserAgent 100, which teaches the claim limitation.

(C) Applicant argues that with regard to claim 3, Theimer does not teach or suggest authentication information and certainly not cryptographic authentication information.

In regards to point (C), examiner respectfully disagrees.

Column 21, lines 23-26, Theimer discloses Authentication controls could be added so that the Badge Server only returns information about a particular badge ID to a list of authorized clients for that badge ID, and encryption will help for this problem as well (i.e. inherently, "cryptographic authentication information" is obtained for the badge server)

(D) Applicant argues that with regard to claim 7, there is nothing in Theimer that teaches or describes control transfer based upon the position of the two external processors.

In regards to point (D), examiner respectfully disagrees.

Figure 1, Theimer discloses various mobile units such as 24, 26 and 28 (i.e. external processors) that moves around the cells 11, and based on their position, they access the network through a wireless media.

Column 6, lines 38-56, Theimer discloses mobile unit 26 may be carried by a user throughout the workplace, and further may identify the user to sensing devices, likewise mobile unit 24. Therefore, Theimer teaches the above limitation.

(E) Applicant argues that in addition to point (D), Theimer does not teach priority systems for controlling resources based upon location as stated in the rejection.

In regards to point (E), examiner respectfully disagrees.

Column 26, lines 14-23, Theimer discloses some devices may belong to particular users--a workstation in an office, for example, may be thought of as belonging

to the user who resides in that office. Other devices, such as those providing shared information tailored to the profiles of user in close proximity (i.e. "based upon location") to the device, may share ownership and mediate between the needs and desires of a number of users. Such ownership privileges may allow the user highest priority for controlling the resources of that workstation. This portion of Theimer explicitly teach the above limitation.

(F) In regard to claim 8, Applicant argues that Theimer does not teach priority systems for respective external processors as stated in the rejection.

In regards to point (F), examiner respectfully disagrees.

The above arguments were addressed in point (E).

(G) In regard to claims 11, 15, and 16, Applicant argues that Theimer does not teach or suggest at least: wherein the machine is located in a space that includes a floor that can be referenced in dimensional coordinates and the control grid corresponds to a defined area of the floor that is a subset of the space.

Such arguments are moot in view of the new ground(s) of rejection.

(H) In regard to claim 11, Applicant argues that Theimer does not teach selecting a file with a portable processor.

In regards to point (H), examiner respectfully disagrees.

Column 6, lines 57-61, Theimer discloses tab 26, which is a mobile device, may report events generated by its user in response to information displayed on its screen (i.e. the portable processor 26, by reporting events in response to information displayed on its screen, it is clearly taught that generation of events by the user are: "selected file" that are displayed on the processor 26 screen).

(I) In regard to claim 18, Applicants dispute that that Theimer teaches or suggests providing relative position data relative to a reference point.

In regards to point (I), examiner respectfully disagrees.

Column 2, lines 11-16, Theimer discloses the receivers placed in each a building allowing detection of where each user is currently located. In doing so, it must be done according to "a reference point". In this case, each receiver is represented "a reference point".

(J) In regard to claim 8, Applicants dispute that that Theimer teaches or suggests providing relative position data relative to a reference point.

In regards to point (J), examiner respectfully disagrees.

Column 2, lines 11-16, Theimer discloses the receivers placed in each a building allowing detection of where each user is currently located. In doing so, it must be done according to "a reference point". In this case, each receiver is represented as "a reference point".

(K) In regard to claim 21, Applicants submit that Eslambolchi does not teach or suggest and indoor electromagnetic wave positioning system.

In regards to point (K), examiner respectfully disagrees.

column 2, lines 17-18, Eslambolchi discloses electromagnetic waves being generated out of the antenna.

In addition to the above, Examiner would like to point out that Theimer alone teaches indoor electromagnetic wave positioning system (column 6, lines 18-24)

***9. Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall
Patent Examiner
Art Unit: 2157

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100